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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/921,057
Filing Date: August 03, 2001
Appellant(s): ASMUSSEN ET AL.

MAILED

SEP 2 7 2007

Technology Center 2100

Eamon J. Wall

<u>For Appellant</u>

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 28, 2007, appealing from the Office

action mailed January 11, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial

proceedings, which will directly affect or be directly affected by or have a bearing on the

Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in

the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is

correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,493,677	**Balogh**	**02-1996**
6,651,253	**Dudkiewicz**	**11-2003**
2002/0038308	**Cappi**	**03-2002**
6,182,028	**Karaali**	**01-2001**

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   **Claims 1 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balogh (US Patent No. 5,493,677) filed June 8, 1994, in view of Dudkiewicz (US Patent No. 6,651,253) filed November 16, 2001; Provisional November 16, 2000.**

Regarding Claims 1 and 21, Balogh discloses an apparatus for suggesting available aggregated content from a plurality of media sources in a digital communications network, comprising:

a content metadata crawler that searches metadata related to the available content and produces a metadata list (column 3, lines 2-10 and column 10, lines 22-28, Balogh), wherein the metadata list comprises a plurality of metadata elements, and wherein each metadata element comprises one or more metadata fields (Fig.3, item 262, Balogh);

a suggestion keyword indexer coupled to the content metadata crawler, wherein the suggestion keyword indexer receives the metadata list and indexes the metadata elements (Fig.6; columns 8-9, lines 64-67 and 1-9, respectively, Balogh);

a suggestion database coupled to the suggestion keyword indexer that stores the indexed metadata elements (column 9, lines 9-14, Balogh); and

a suggestion database processor coupled to the content metadata crawler, the suggestion keyword indexer and the suggestion keyword database (column 4, lines 14-22, Balogh). However, Balogh is silent with respect to the content being aggregated from the plurality of media sources and the suggestion database processor searching the suggestion database, based on one or more search request criteria, to produce a

list of keywords to be used to suggest content from the plurality of media sources. On

the other hand, Dudkiewicz discloses the content is being aggregated from the plurality

of media sources (column 14, lines 39-67, Dudkiewicz)[1] and the suggestion database

processor searching the suggestion database, based on one or more search request

criteria, to produce a list of keywords to be used to suggest content from the plurality of

media sources (column 12-13, lines 39-67 and 1-8, respectively, Dudkiewicz). Balogh

and Dudkiewicz are analogous art because they are from the same field of endeavor of

the identification of programming events of interest to a viewer. It would have been

obvious to one of ordinary skill in the art at the time of the invention to incorporate

Dudkiewicz's teachings into the Balogh system. A skilled artisan would have been

motivated to combine as suggested by Dudkiewicz at column 3, lines 47-56, in order to

producing evaluations which reflect an actual users preferences more accurately, and

further matching and ranking programs based on viewer preferences. As a result,

provide intelligence in receiving and recording devices for identifying programs of

interest on behalf of the user.

3.   Claims 2-3,5-11,22-23,and 26-33 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Balogh (US Patent No. 5,493,677) filed June 8, 1994, in

view of Dudkiewicz (US Patent No. 6,651,253) filed November 16, 2001;

Provisional November 16, 2000, as applied to claim1 above, and further in view of

Cappi (US Patent Application No. 20020038308) filed May 27, 1999.

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[1] Examiner Notes: The plurality of media sources corresponds to video, television, and personal digital

Regarding Claims 2 and 22, the combination of Balogh in view of Dudkiewicz,

disclose the apparatus wherein the suggestion keyword indexer, comprises:

an extraction module that extracts and caches a value of each metadata field

(column 9, lines 25-33, Dudkiewicz);

a parsing module coupled to the extraction module that parses contents of

uniquely identifying metadata fields (column 9, lines 1-8 and column 10, lines 46-55,

Dudkiewicz), wherein the contents of a uniquely identifying field comprises one or more

word items (column 12, lines 33-37, Balogh);

a classifying module coupled to the parsing module that classifies one or more of

the one or more word items (column 11, lines 11-39, Dudkiewicz); and

a comparison module coupled to the classifying module that compares one or

more of the one or more word items to determine a list of related terms (columns 11-12,

lines 40-67 and 1-8, respectively, Dudkiewicz). However, the combination of Balogh in

view of Dudkiewicz, are silent with respect to an index matrix record builder that creates

and augments an index matrix record for each of the classified word items. On the other

hand, Cappi discloses an index matrix record builder that creates and augments an

index matrix record for each of the classified word items ([0058-0059], lines 1-6 and 1-

10, respectively, Cappi). Balogh in view of Dudkiewicz, and further in view of Cappi, are

analogous art because they are from the same field of endeavor of database

integration. It would have been obvious to one of ordinary skill in the art at the time of

assistants (i.e. PDA's). Other media sources are also found at columns 30-31, lines 65-67 and 1-5;

the invention to incorporate Cappi's teachings into the Balogh in view of Dudkiewicz

system. A skilled artisan would have been motivated to combine as suggested by Cappi

at [0009], lines 1-15, in order to logically integrating databases onto a global data

dictionary so a user can conduct searches and retrieve data that corresponds to a data

element needed. As a result, providing the most relevant information to the user first.

Regarding Claims 3 and 23, the combination of Balogh in view of Dudkiewicz,

and further in view of Cappi, disclose the apparatus further comprising one or more of a

dictionary database, a thesaurus database and a lexicon database ([0034], lines 1-9,

Cappi), wherein the comparison module compares a word item to entries in one or more

of the dictionary database, the thesaurus database and the lexicon database, and

([0042], lines 1-12, Cappi) wherein the list of related terms includes one or more of a

dictionary definition, lexicon data, and one or more synonyms ([0059-0062], lines 1-

10,1-6,1-12, and 1-10, respectively, Cappi).

Regarding Claims 5 and 26, the combination of Balogh in view of Dudkiewicz,

and further in view of Cappi, disclose the apparatus wherein the uniquely identifying

fields comprise one or more of content type, content title, date of production, rating and

parental notice information, performer, artist, writer, author, plot summary, keyword list,

and textual content description (Fig.7; columns 10-11, lines 46-67 and 1-10,

respectively, Dudkiewicz).

respectively, wherein the audio programs and electronic print are examples.

Regarding Claims 6 and 27, the combination of Balogh in view of Dudkiewicz,

and further in view of Cappi, disclose the apparatus wherein the index matrix record

builder comprises a vector assignment module that assigns a word item vector value for

a word item, wherein the word item vector value may be used as a measure of similarity

between a word item and a related term ([0103], lines 1-15, Cappi).

Regarding Claims 7 and 28, the combination of Balogh in view of Dudkiewicz,

and further in view of Cappi, disclose the apparatus wherein the suggestion database

processor, comprises:

a vector determination module that assigns a search term suggestion vector

range to one or more of the search request criteria (columns 11-12, lines 65-67 and 1-8,

Dudkiewicz); and

a vector value comparator that compares a vector value of a search term and the

word item vector value to determine if the word item vector value falls within the

suggestion vector range of the search term (column 12, lines 9-38, Dudkiewicz),

wherein word items that fall within the suggestion vector range may be used to search

for suggested content (column 16, lines 6-24, Dudkiewicz).

Regarding Claims 8 and 29, the combination of Balogh in view of Dudkiewicz,

and further in view of Cappi, disclose the apparatus wherein the suggestion vector

range is adjustable by a user of the apparatus (columns 14-15, lines 60-67 and 1-9,

Balogh).

Regarding Claims 9,30, and 31, the combination of Balogh in view of Dudkiewicz,

and further in view of Cappi, disclose the apparatus further comprising a user-defined

filter, comprising:

a user history filter (column 17, lines 25-27, Dudkiewicz);

a user profile filter (column 17, lines 19-25, Dudkiewicz); and

an approved content access filter, wherein the suggestion database processor

processes search results from the suggestion database using the user-defined filter to

produce the list of suggested content (column 14, lines 8-17, Dudkiewicz).

Regarding Claims 10 and 32, the combination of Balogh in view of Dudkiewicz,

and further in view of Cappi, disclose the apparatus further comprising a ranking

module, wherein the ranking module ranks content in the list of suggested content

(columns 22-23, lines 65-67 and 1-16, Dudkiewicz).

Regarding Claims 11 and 33, the combination of Balogh in view of Dudkiewicz,

and further in view of Cappi, disclose the apparatus where in the ranking module ranks

the content according to one or more of a user historical analysis report and similarities

to previously accessed content by the user (column 30, lines 24-55, Dudkiewicz).

4.   Claims 4,24,and 25 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Balogh (US Patent No. 5,493,677) filed June 8, 1994, in view of

Dudkiewicz (US Patent No. 6,651,253) filed November 16, 2001; Provisional

November 16, 2000 and further in view of Cappi (US Patent Application No.

20020038308) filed May 27, 1999 and further in view of Karaali (US Patent No.

6,182,028) filed November 7, 1997.

        Regarding Claims 4,24, and 25, the combination of Balogh in view of Dudkiewicz,

and further in view of Cappi, disclose the apparatus wherein the classifying module

comprises one or more computational linguistics tools (column 12, lines 57-64, Balogh),

wherein the one or more computational linguistic tools determine part-of-speech data of

a word item (column 8, lines 1-22, Balogh), and wherein the index matrix record builder

adds the part-of-speech data to the index matrix record for the word item (column 6,

lines 6-27, Balogh). However, the combination of Balogh in view of Dudkiewicz, and

further in view of Cappi, are silent with respect to the linguistic tool including a rule-

based part-of-speech tagging algorithm and a stochastic part-of-speech tagging

algorithm. On the other hand, Karaali discloses the linguistic tool including a rule-based

part-of-speech tagging algorithm and a stochastic part-of-speech tagging algorithm

(column 3, lines 3-14, Karaali). Balogh in view of Dudkiewicz, further in view of Cappi,

and further in view of Karaali are analogous art because they are from the same field of

endeavor of relating part-of-speech. It would have been obvious to one of ordinary skill

in the art at the time of the invention to incorporate Karaali's teachings into the Balogh in

view of Dudkiewicz, and further in view of Cappi system. A skilled artisan would have

been motivated to combine as suggested by Karaali at column 1, lines 11-21, in order to

assign the correct part of speech to each word in a sentence, based on the word's

usage. As a result, disclosing the accurate recognition of text.

(10) Response to Argument

Appellant argues, with respect to independent claims 1 and 21, the

Dudkiewicz provisional application fails to support the invention of the

Dudkiewicz '253 patent, by not being able to find the teaching or suggestion of "a

metadata generator providing automatic generation of keywords" (as recited by

the Dudkiewicz '253 patent) and, thereby, fails to satisfy the requirement under 35

USC 112, first paragraph, which is required to properly claim priority under 35

USC 119(e).

Examiner respectfully disagrees. To begin, the claim limitation, which is being

addressed within claims 1 and 21 respectively are "wherein the suggestion database

processor searches the suggestion database...to produce a list of keywords ..." or

"second searching means...for searching the storing means...to produce a list of

metadata elements ...". The Dudkiewicz '253 patent states, "*An example of processing*

performed by a metadata generator to produce metadata for a programming event in accordance with an

embodiment of the invention is illustrated in FIG. 9. Initially, the metadata generator receives data for

analysis that relates to a programming event (50)...For example, the InterMedia media searching tool

produced by Oracle Corporation, or the K2 classification tool produced by Verity Corporation, may be

configured to define a thesaurus reflecting words, phrases and concepts associated with the categories of the classification hierarchy, such that PDD and production data for a programming event may be searched with respect to each category of the hierarchy to generate a list of matched categories with associated confidence scores in a range from 1% to 100%" (columns 11-12, lines 40-67 and 1-8, respectively) and "Once determined, the identifiers and associated goodness of fit scores of the representative categories are stored in delimited fashion (56). Other data is also generated through processing of the PDD and production data and is stored together with the goodness of fit scores in delimited fashion to comprise metadata for the programming event. The other data referred to here may comprise data such as is shown in the exemplary metadata of FIG. 7, such as description, time, duration, keywords, etc. Like categories, keywords may be assigned goodness of fit scores using a classification application. A variety of storage formats are available for storing the metadata. For example, the metadata may be stored as an XML document using appropriate tags for indicating the various types of data within the metadata...In further preferred embodiments, **the metadata generator may additionally provide automatic generation of keywords**. Keywords are preferably generated through analysis of descriptive data included in any production data and PDD data that is available for the programming event. In one preferred embodiment, all text data associated with the programming event such as script data and PDD data is processed to identify all verbs and all nouns and associated adjectives contained therein. These candidate keywords are then provided as input to the categorization tool, which produces a goodness of fit score for each category of the classification hierarchy based on each input candidate keyword. Keywords are then chosen from among the candidate keywords based on the highest goodness of fit score associated with each candidate. To provide further precision, the category goodness of fit scores for each candidate keyword may be correlated with the category goodness of fit scores for the programming event as a whole, so that candidates having high goodness of fit scores for categories that are not relevant to the programming event as a whole are not chosen as keywords. The highest category goodness of fit score for each chosen keyword may be adopted as a goodness of fit score for the keyword itself" (columns 12-13, lines 39-67 and 1-8 respectively). The preceding excerpts

discuss a metadata generator for producing metadata (i.e., keywords) for a

programming event, wherein a search is conducted in order to generate a list of

matched categories with associated confidence scores in relation to the search. The

Examiner notes, the appellant is not arguing/disagreeing that the Dudkiewicz '253

patent teaches the argued limitation as can be seen within the appellant's arguments

(see page 11 of 25 of Appeal Brief). As such, the above mapping of the Dudkiewicz '253

patent is discussed merely to give an overview and better understanding of the

application at hand. However, the appellant is arguing that the Dudkiewicz provisional

application does not support the Dudkiewicz '253 patent with reference to the excerpt

cited above, and in particular, the citation of "providing automatic generation of

keywords" (see column 12, lines 53-54, Dudkiewicz '253 patent). On the other hand, the

Dudkiewicz provisional application states, "*The MyDTV system will allow users to define their

preferences, and will then search all available channels to find the programs that match the user's

interests. The system's main features are: 1) Definition of user profiles which represent the viewer's

interests. 2) Automatic selection and recording of programs on the basis of the user profiles. The user's

profile is compared with metadata[2] transmitted together with program broadcasts, in order to determine

whether or not to record the program*" (see page 15 of 57). Also, the Dudkiewicz provisional

application teaches "*The software will allow the user to search the imported electronic program guide

(EPG) for programs using the following criteria: date, program name, keywords. Any programs that match

the search criteria will be displayed...When defining a user profile, users will select a profile from a list of

standard profiles (such as "sports freak", "talk show junkie"), and the appropriate categories will be

chosen automatically*" (see page 24 of 57). A MyDTV system is discussed above, which is a

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[2] In this context, the term "metadata" refers to data that describes a program that is to be broadcast,
specifically, the name of the program and the program categories to which it has been assigned (see

comprehensive digital television recording and viewing package. MyDTV allows for the personalization of program channels in relation to the users preferences, which is determined by the users profile. The preceding excerpt discloses the MyDTV system (i.e., metadata generator – something that generates metadata) allows the users to define their preferences and then search the channels to find the programs to match the interests. The user's profile is compared with metadata (i.e., the metadata is the data that describes a program, such as the name and categories it has been assigned) transmitted with program broadcasts to determine whether to record a program. The software allows the user to perform a search for programs using keywords and once the search is conducted the programs that match are displayed. Further, when defining a user profile, the user selects a profile from a list of stand profiles and the appropriate categories are chosen automatically. For instance, a user selects "talk show junkie" from a list of standard profiles, after the user selects a profile, the appropriate categories in relation to "talk shows" are automatically chosen for the user (i.e., 'Oprah', 'Ricky Lake', 'Jerry Springer', etc.). The list of appropriate categories corresponds to the keywords, which are automatically generated. After a telephonic interview with the appellant, both the examiner and appellant understand that the provisional application is not required to recite verbatim what the patent application states, as long as the functionality from the patent application is supported within the provisional application. As a result, the Dudkiewicz provisional application in fact supports the argued limitation of the Dudkiewicz '253 patent, for which it was relied upon.

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page 15 of 57).

Appellant argues, the Examiner has failed to establish a prima facie case of obviousness against the Appellant's invention, in regards to claims 2-3,5-11,22-23, and 26-33, due to the fact that the stated claims depend directly or indirectly from the above-argued independent claims 1 and 21.

Examiner respectfully disagrees. As stated within the response above, the Dudkiewicz provisional application does in fact support the Dudkiewicz '253 patent and is deemed to be an appropriate rejection under 35 USC 103. As such, the Examiner has provided a prima facie case of obviousness against the Appellant's current invention.

Appellant argues, the Examiner has failed to establish a prima facie case of obviousness against the Appellant's invention, in regards to claims 4,24, and 25, due to the fact that the stated claims depend directly or indirectly from the above-argued independent claims 1 and 21.

Examiner respectfully disagrees. As stated within the response above, the Dudkiewicz provisional application does in fact support the Dudkiewicz '253 patent and is deemed to be an appropriate rejection under 35 USC 103. As such, the Examiner has provided a prima facie case of obviousness against the Appellant's current invention.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

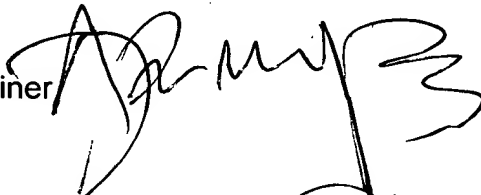For the above reasons, it is believed that the rejections should be sustained.

An Appeal Conference was held on September 18, 2007 with conferees:

Chelcie Daye (Patent Examiner), Apu Mofiz (SPE), and Mohammad Ali (SPE)

Respectfully submitted,
CLD
September 24, 2007

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